

IN THE CLAIMS:

Please amend claims 1, 3, 4, 9-10, 15 and 16 as follows:

1. (Twice Amended) Process for the isolation in aqueous phase of a nucleic material present in a sample[, comprising a step of] by adsorption of said nucleic material onto a particulate support, [wherein] comprising:

[\* according to a step] (a) [for producing the adsorption reagent,] providing an adsorption reagent [is available which comprises] comprising a sol consisting of an aqueous continuous phase and a discontinuous phase of the particulate support, which comprises a functionalized, particulate polymer, said polymer being obtained by polymerization of (1) a first water-soluble monomer of acrylamide or of an acrylamide derivative, (2) at least one cross-linking agent, and (3) at least a second cationic and water-soluble functional monomer, said polymer having a predetermined lower critical solubility temperature (LCST) which is between 25 and 45°C,

[\* according to a step] (b) [for] bringing into contact[, ] the adsorption reagent [is brought into contact] with the sample containing the nucleic material to adsorb the nucleic material to the particulate support,

[\* according to a adsorption step (c), for the bringing into contact according to (b), at least one of the following parameters for] wherein, in said contacting step (c), the reaction medium [is chosen] has:

- a pH at most equal to 7,
- an ionic strength at most equal to  $10^{-2}$  M, and
- a temperature less than the LCST of the polymer,

[\* according to a separation step (d), after having] (c) optionally [observed] observing that the adsorption has taken place,

(d) separating the discontinuous phase [is separated] from the continuous phase, and

[\* according to a desorption step] (e)[,] dissociating the nucleic material [is dissociated], by desorption, from the particulate support by increasing the ionic strength up to an ionic strength greater than  $10^{-2}$  M.

3. (Twice Amended) Process for the isolation in aqueous phase of a nucleic material present in a sample[, comprising a step of] by adsorption of said nucleic material onto a particulate support, [wherein] comprising:

[\* according to a step] (a) [for producing the adsorption reagent,] providing an adsorption reagent [is available which comprises] comprising a sol consisting of an aqueous continuous phase and a discontinuous phase of the particulate support, which comprises a functionalized, particulate polymer, said polymer being obtained by polymerization of (1) a first water-soluble monomer of acrylamide or of an acrylamide derivative, (2) at least one cross-linking agent and (3) at least a second cationic and water-soluble functional monomer, said polymer having a predetermined lower critical solubility temperature (LCST) which is between 25 and 45°C,

[\* according to a step] (b) [for] bringing into contact[, ] the adsorption reagent [is brought into contact] with the sample containing the nucleic material to absorb the nucleic material to the particulate support,

[\* according to a adsorption step (c), for the bringing into contact according to (b),] wherein, in said contacting step (c), the reaction medium has:

- an ionic strength at most equal to  $10^{-2}$  M, [is selected for the reaction medium]

- a pH at most equal to 7, and

- a temperature less than the LCST of the polymer,

[\* according to a separation step (d), after having] (c) optionally [observed]  
observing that the adsorption has taken place, and  
(d) separating the discontinuous phase [is separated] from the continuous  
phase.

Claim 4, line 2, delete "according to the adsorption step (c), for the"; and  
line 3, delete "bringing into contact according to (b),".

9. (Amended) Process according to Claim 1, wherein at least one probe and/or  
[one] primer capable of specifically hybridizing to the nucleic material is added to the sample  
before [step (b)] contacting the adsorption reagent and the sample, or to the reaction medium  
after contacting the adsorption reagent and the sample [step (b), and in particular after step (c)  
or step (d)].

10. (Thrice Amended) Process according to Claim 1, wherein:  
[\* according to (b) and (c),] in the contacting step (c), the adsorption reagent is  
brought into contact with the nucleic material, the nucleic material consisting of a probe or a  
primer, in order to obtain a hybridization reagent, and

[\* according to (b'),] after having optionally observed that the adsorption has  
taken place, and separated the hybridization reagent from the reaction medium, said  
hybridization reagent is brought into contact with a medium containing at least one nucleic  
acid or nucleic acid fragment, under suitable conditions for the hybridization or the extension  
of the primer.

Claim 15, line 2, delete "water-soluble".

16. (Thrice Amended) Process according to Claim 1, wherein the polymer is  
obtained in the presence of a polymerization initiator [is] selected from [the] water-soluble  
neutral and cationic initiators.